Abstract of the Disclosure

An optical fiber propagation time measurement circuit. A light pulse is iteratively transmitted into a near end of a fiber under test (FUT) at a predetermined frequency and detected at a far end of the FUT after a propagation time. A repetitive propagation signal having a predetermined amplitude and a width corresponding the propagation time is developed by detection circuitry. The d.c. voltage average of the propagation signal is determined and used to compute the propagation time since the ratio of the d.c. voltage average to the predetermined amplitude is equal to the ratio of the propagation time to the period of the light pulses.